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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/918,789

07/27/2001

Jayne B. Roderick

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03/29/2004

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EXAMINER

HANNE, SARA M

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 03/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/918,789

Applicant(s)

JAYNE RODERICK, KAREN  
MACLEAN, VERPLANK,

Examiner

Sara M Hanne

Art Unit

2173

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

2. Claims 1, 5, and 8 -17 rejected under 35 U.S.C. 102(a) as being clearly anticipated by Allport, US Patent Application 2002/0135619.

As in Claims 1, 16 and 17, Allport teaches a pushbutton user interface, method and storage medium for enabling a user to preview the effect of activating a pushbutton comprising a means for sensing input (display activation) to the pushbutton that does not activate the button and in response to sensing input, displaying a preview indicating the effect of activating the pushbutton ("a first type of physical motion ... may cause a first event to occur, such as displaying information on the display to describe a function of the button", Pg. 1, par. 5).

As in Claim 5, Allport teaches the display to be visual ("quickly see what each button 15 is used for if the user so desires", Pg. 4, par.30).

As in Claim 8, Allport teaches sensing an input that produces activation of the pushbutton (execution activation motion).

As in Claim 9, Allport teaches the preview sensing means to be along an axis different than the activation sensing means ("moving down half-way then down all the way", Pg. 4, par. 32).

As in Claim 10, Allport teaches the preview sensing means to be along an axis different than the activation sensing means ("a first activation requirement could be sliding the button 15 forward towards the display area 25, while the second activation requirement could be pressing down on the button", Pg. 4, par. 32).

As in Claim 11, Allport teaches the preview sensing means to be along an axis orthogonal to the axis along which the activation sensing means senses motion (See Claim 10 rejection, Pg. 4, par. 32).

As in Claim 12, Allport teaches the interface to enable a user to preview the effect of activating any of several pushbuttons by identifying which one an input has been provided for that does not produce an activation and displaying a preview in response to the sensed input of the identified pushbutton (plurality of buttons, and "the function of each button or button set is displayed when said button or button set is activated using a display activation motion ... ", Pg. 2, par. 19).

As in Claim 13, Allport teaches a mechanical input apparatus (Pg. 1, par. 3) for enabling a user to preview the effect of activating a mechanical input apparatus comprising a means for sensing input to the mechanical input apparatus that does not activate the apparatus and in response to sensing input, displaying a preview indicating the effect of activating the mechanical input apparatus (See Claim 1 rejection *supra*).

As in Claim 14, Allport teaches the mechanical input apparatus to be a doorknob ("various types of buttons, such as ... knobs", Pg. 1, par. 3).

As in Claim 15, Allport teaches the mechanical input apparatus to be a switching apparatus ("various types of buttons, such as ... switches" , Pg. 1, par. 3).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Allport, US Patent Application 2002/0135619, and further in view of Braun et al., US Patent 6343349.

Allport illustrates a method for button activation prediction and visual preview of button activation by sensing user input. While Allport teaches such a system with button sensing and preview activation interface, they fail to show the use of a force sensitive resistor to sense user input as recited in Claim 2. In the same field of the invention, Braun et al. teaches an activation interface similar to that of Allport.

In addition, Braun et al. further teaches the use of a force sensitive resistor as a sensor for motion activation (Column 9, lines 56-61). It would have been obvious to one of ordinary skill in the art, having the teachings of Allport and Braun et al. before him at the time the invention was made, to modify the button sensing and preview activation interface taught by Allport to include the force sensitive resistor of Braun et al., in order to obtain a force sensing method for user input. One would have been motivated to make such a combination because a force responsive apparatus for activating a button's activation preview would have been obtained, as taught by Braun et al.

5. Claims 3-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Allport, US Patent Application 2002/0135619, and further in view of Chang et al., US Patent 6424356.

Allport illustrates a method for button activation prediction and visual preview of button activation by sensing user input. While Allport teaches such a system with button sensing and preview activation interface, they fail to show the use of potentiometers and strain gauges as recited in Claims 3 and 4 and the use of audio and haptic displays as in Claims 6 and 7. In the same field of the invention, Chang et al. teaches an activation interface similar to that of Allport.

In addition as in Claims 3 and 4, Chang et al. further teaches the use of potentiometers or strain gauges as sensors for motion activation (Column 5, lines 29-40). It would have been obvious to one of ordinary skill in the art, having the teachings of Allport and Chang et al. before him at the time the invention was made, to modify the button sensing and preview activation interface taught by Allport to include the potentiometer or strain gauge of Chang et al., in order to obtain a sensing method for user input. One would have been motivated to make such a combination because a apparatus for sensing and activating a button's activation preview from different levels of strain or resistance would have been obtained, as taught by Chang et al.

***Conclusion***

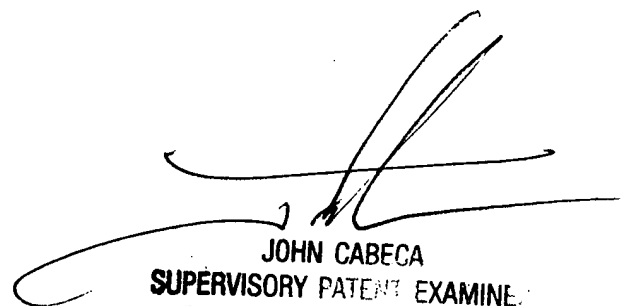
The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach similar input sensing apparatus and activation responsive inputs and methods.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sara M Hanne whose telephone number is (703) 305-0703. The examiner can normally be reached on M-F 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (703) 308-3116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-5484.

smh



JOHN CABECA  
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